

and line number where this limitation is supposedly found, or in the alternative to withdraw the rejection.

Claim 23 is:

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The particles of claim 22, wherein the dry binder particles comprise a polymer, and wherein the dry carbon particles comprise activated and conductive carbon.

10 The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 22.

Claim 24 is:

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The particles of claim 23, wherein the binder comprises fluoropolymer particles.

The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 22.

Claim 25 is:

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The particles of claim 24, wherein the binder comprises PTFE.

The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 22.

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Claim 26 is:

The particles of claim 23, wherein the binder comprises particles subjected to high shear forces.

30 The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 22.

The Examiner rejects this claim as supposedly anticipated by Kao, and expresses the view that this limitation is supposedly found in Kao at page 3. The undersigned has diligently studied the entirety of the cited page 3, and indeed has likewise studied the remainder of the reference, and is unable to find the word “shear” at all, let alone the limitation of “subjecting” a material to “high shear forces”. The Examiner is respectfully invited to indicate by page and line number where this limitation is supposedly found, or in the alternative to withdraw the rejection.

Claim 27 is:

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The particles of claim 26, wherein the high shear forces are applied by gas at more than about 60 PSI.

The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 22.

The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 26.

The Examiner rejects this claim as supposedly anticipated by Kao, and expresses the view that this limitation is supposedly found in Kao. The Examiner does not, however, indicate where in Kao this limitation may supposedly be found. The undersigned has diligently studied the entirety of the cited reference, and is unable to find the word “shear” at all, let alone “high shear forces”. Nor has the undersigned been able to find application of forces by gas. Nor has the undersigned been able to find application of forces by gas at more than the stated pressure. The Examiner is respectfully invited to indicate by page and line number where this limitation is supposedly found, or in the alternative to withdraw the rejection.

Claim 28 is:

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The particles of claim 26, wherein the binder comprises milled polymer particles.

The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 22.

- 5 The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 26.

The Examiner rejects this claim as supposedly anticipated by Kao, and expresses the view that this limitation is supposedly found in Kao at page 3, lines 36-37. The undersigned has diligently studied
10 the entirety of the cited page and lines, and indeed has likewise studied the remainder of the reference, and is unable to find the word “milled” at all. The Examiner is respectfully invited to indicate by page and line number where this limitation is supposedly found, or in the alternative to withdraw the rejection.

- 15 Claim 29 is:

The particles of claim 26, wherein the binder comprises jet milled polymer particles.

The rejection should be withdrawn for the same reasons as are mentioned above in connection with
20 claim 22.

The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 26.

- 25 The Examiner rejects this claim as supposedly anticipated by Kao, and expresses the view that this limitation is supposedly found in Kao at page 3, lines 36-37. The undersigned has diligently studied the entirety of the cited page and lines, and indeed has likewise studied the remainder of the reference, and is unable to find the word “jet” at all. The Examiner is respectfully invited to indicate by page and line number where this limitation is supposedly found, or in the alternative to withdraw the rejection.

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Claim 30 is:

The particles of claim 26, wherein the binder comprises hammer milled polymer particles.

5 The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 22.

The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 26.

10 The Examiner rejects this claim as supposedly anticipated by Kao, and expresses the view that this limitation is supposedly found in Kao at page 3, lines 36-37. The undersigned has diligently studied the entirety of the cited page and lines, and indeed has likewise studied the remainder of the reference, and is unable to find the word “hammer” at all. The Examiner is respectfully invited to indicate by page and line number where this limitation is supposedly found, or in the alternative to withdraw the
15 rejection.

Claim 31 is:

20 The particles of claim 24, wherein the electrode is an energy storage device electrode.

The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 22.

25 Claim 32 is:

The particles of claim 31, wherein the energy storage device is a capacitor.

30 The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 22.

The Examiner rejects this claim as supposedly anticipated by Kao, and expresses the view that this

limitation is supposedly found in Kao at page 2. As best understood by the undersigned, however, Kao does not disclose a capacitor but instead discloses a “capacitative-type battery”. As commonly used, the words “battery” and “capacitor” are not synonymous. Indeed the very fact that Kao seems to feel the need to modify the noun “battery” with an adjective “capacitative-type” seems to reinforce that the words are not synonymous. It thus appears that the Examiner is of the view that “capacitative-type battery” is supposedly synonymous with “capacitor”. Applicant's attorney disagrees with this view, and motivated by the case of *In Re Ahlert and Kruger*, 165 USPQ 418 (CCPA 1970) applicant's attorney hereby challenges this view and asks whether the Examiner can show support for this view, or in the alternative suggests that the rejection be withdrawn.

Claim 33 is:

An electrode, comprising; a dry blend of dry carbon particles and dry binder particles subjected to high shear forces.

The Examiner rejects this claim as supposedly anticipated by Kao, and expresses the view that this limitation is supposedly found in Kao at page 2, lines 37-39. The undersigned has diligently studied the entirety of the cited page 3, and indeed has likewise studied the remainder of the reference, and is unable to find the word “shear” at all, let alone the limitation of “subjecting” a material to “high shear forces”. The Examiner is respectfully invited to indicate by page and line number where this limitation is supposedly found, or in the alternative to withdraw the rejection.

Claim 34 is:

The electrode of claim 33, wherein the blend comprises approximately 50% to 99% activated carbon.

The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 33.

Claim 35 is:

The electrode of claim 33, wherein the blend comprises approximately 0% to 25% conductive carbon.

- 5 The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 33.

The Examiner rejects this claim as supposedly anticipated by Kao, and expresses the view that this limitation is supposedly found in Kao at page 4, lines 29-30. The undersigned has diligently studied
10 the entirety of the cited page and lines, and indeed has likewise studied the remainder of the reference, and is unable to find this range, nor any value in this range. The Examiner is respectfully invited to indicate by page and line number where this limitation is supposedly found, or in the alternative to withdraw the rejection.

- 15 Claim 36 is:

The electrode of claim 33, wherein the blend comprises approximately 0.5% to 20% fluoropolymer.

- 20 The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 33.

Claim 37 is:

- 25 The electrode of claim 33, wherein the blend comprises approximately 80% to 95% activated carbon, approximately 0% to 15% conductive carbon, and approximately 3% to 15% fluoropolymer.

- The rejection should be withdrawn for the same reasons as are mentioned above in connection with
30 claim 33.

The Examiner rejects this claim as supposedly anticipated by Kao, and expresses the view that this limitation is supposedly found in Kao at page 4, lines 29-41. The undersigned has diligently studied the entirety of the cited page and lines, and indeed has likewise studied the remainder of the reference, and is unable to find these three ranges, nor any value in these three ranges. The Examiner is

5 respectfully invited to indicate by page and line number where this limitation is supposedly found, or in the alternative to withdraw the rejection.

Claim 38 is:

10 The electrode of claim 33, wherein the electrode is a capacitor electrode.

The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 33.

15 The Examiner rejects this claim as supposedly anticipated by Kao, and expresses the view that this limitation is supposedly found in Kao at page 2. As best understood by the undersigned, however, Kao does not disclose a capacitor but instead discloses a “capacitative-type battery”. As commonly used, the words “battery” and “capacitor” are not synonymous. Indeed the very fact that Kao seems to feel the need to modify the noun “battery” with an adjective “capacitative-type” seems to reinforce that the
20 words are not synonymous. It thus appears that the Examiner is of the view that “capacitative-type battery” is supposedly synonymous with “capacitor”. Applicant's attorney disagrees with this view, and motivated by the case of *In Re Ahlert and Kruger*, 165 USPQ 418 (CCPA 1970) applicant's attorney hereby challenges this view and asks whether the Examiner can show support for this view, or in the alternative suggests that the rejection be withdrawn.

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Claim 39 is:

The electrode of claim 38, wherein the electrode is a double-layer capacitor electrode.

30 The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 33.

The Examiner rejects this claim as supposedly anticipated by Kao, and expresses the view that this limitation is supposedly found in Kao at page 2. As best understood by the undersigned, however, Kao does not disclose a capacitor but instead discloses a “capacitative-type battery”. As commonly used,
5 the words “battery” and “capacitor” are not synonymous. Indeed the very fact that Kao seems to feel the need to modify the noun “battery” with an adjective “capacitative-type” seems to reinforce that the words are not synonymous. It thus appears that the Examiner is of the view that “capacitative-type battery” is supposedly synonymous with “capacitor”. Applicant's attorney disagrees with this view, and motivated by the case of *In Re Ahlert and Kruger*, 165 USPQ 418 (CCPA 1970) applicant's
10 attorney hereby challenges this view and asks whether the Examiner can show support for this view, or in the alternative suggests that the rejection be withdrawn.

Claim 40 is:

15 The electrode of claim 33, wherein the electrode is a battery electrode.

The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 33.

20 Claim 41 is:

The electrode of claim 33, wherein the electrode is a fuel-cell electrode.

The rejection should be withdrawn for the same reasons as are mentioned above in connection with
25 claim 33.

The Examiner rejects this claim as supposedly anticipated by Kao, and expresses the view that this limitation is supposedly found in Kao at page 2. The undersigned has diligently studied the entirety of the cited page 2, and indeed has likewise studied the remainder of the reference, and is unable to find
30 the word “fuel cell” at all. The Examiner is respectfully invited to indicate by page and line number where this limitation is supposedly found, or in the alternative to withdraw the rejection.

Claim 42 is:

5 The electrode of claim 33, further comprising a current collector, wherein the binder and carbon particles are in the form of a coated dried slurry, wherein the slurry is coupled to the current collector.

The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 33.

10 Claim 43 is:

15 A capacitor product, comprising; a dry fibrillized blend of dry particles subjected to high shear forces, the particles including binder and carbon particles; and one or more current collector, wherein the blend of dry particles are disposed onto the one or more current collector as a coating.

20 The Examiner rejects this claim as supposedly anticipated by Kao, and expresses the view that this “capacitor” limitation is supposedly found in Kao at figure 1 and at page 2, lines 29-36. As best understood by the undersigned, however, Kao does not disclose a capacitor but instead discloses a “capacitative-type battery”. As commonly used, the words “battery” and “capacitor” are not synonymous. Indeed the very fact that Kao seems to feel the need to modify the noun “battery” with an adjective “capacitative-type” seems to reinforce that the words are not synonymous. It thus appears that the Examiner is of the view that “capacitative-type battery” is supposedly synonymous with
25 “capacitor”. Applicant's attorney disagrees with this view, and motivated by the case of *In Re Ahlert and Kruger*, 165 USPQ 418 (CCPA 1970) applicant's attorney hereby challenges this view and asks whether the Examiner can show support for this view, or in the alternative suggests that the rejection be withdrawn.

30 The Examiner rejects this claim as supposedly anticipated by Kao, and expresses the view that this “high shear” limitation is supposedly found in Kao at figure 1 and at page 2, lines 29-36. The

undersigned has diligently studied the cited portions, and indeed has diligently studied the entirety of the cited reference, and is unable to find the word “shear” at all, let alone “high shear forces”. The Examiner is respectfully invited to indicate by page and line number where this limitation is supposedly found, or in the alternative to withdraw the rejection.

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Claim 44 is:

The product of claim 43, wherein between the one or more current collector and the dry particles is disposed a bonding layer.

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The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 43.

Claim 45 is:

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The product of claim 43, wherein the one or more current collector comprises aluminum.

The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 43.

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Claim 46 is:

The product of claim 45, further comprising a housing, wherein the one or more current collector is shaped as a roll, wherein the roll is disposed within the housing.

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The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 43.

Claim 47 is:

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The product of claim 46, wherein within the housing is disposed an electrolyte.

The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 43.

5 Claim 48 is:

The product of claim 47, wherein the electrolyte comprises acetonitrile.

10 The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 43.

The Examiner rejects this claim as supposedly anticipated by Kao, and expresses the view that this “acetonitrile” limitation is supposedly found in Kao at page 2. The undersigned has diligently studied the cited portions, and indeed has diligently studied the entirety of the cited reference, and is unable to
15 find the word “acetonitrile” at all. The Examiner is respectfully invited to indicate by page and line number where this limitation is supposedly found, or in the alternative to withdraw the rejection.

Claim 49 is:

20 The product of claim 43, wherein the capacitor is rated to operate at a voltage of no more than about 3.0 volts.

The rejection should be withdrawn for the same reasons as are mentioned above in connection with claim 43.

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The Examiner rejects this claim as supposedly anticipated by Kao, and expresses the view that this “capacitor” limitation is supposedly found in Kao at some unspecified location. As best understood by the undersigned, however, Kao does not disclose a capacitor but instead discloses a “capacitative-type battery”. As commonly used, the words “battery” and “capacitor” are not
30 synonymous. Indeed the very fact that Kao seems to feel the need to modify the noun “battery” with an adjective “capacitative-type” seems to reinforce that the words are not synonymous. It thus appears

that the Examiner is of the view that “capacitative-type battery” is supposedly synonymous with “capacitor”. Applicant's attorney disagrees with this view, and motivated by the case of *In Re Ahlert and Kruger*, 165 USPQ 418 (CCPA 1970) applicant's attorney hereby challenges this view and asks whether the Examiner can show support for this view, or in the alternative suggests that the rejection be withdrawn.

The Examiner rejects this claim as supposedly anticipated by Kao, and expresses the view that this voltage rating limitation is supposedly found in Kao at some unspecified location. It appears that the Examiner is of the view that this voltage rating is somehow “inherent” in Kao. Applicant's attorney disagrees with this view, and motivated by the case of *In Re Ahlert and Kruger*, 165 USPQ 418 (CCPA 1970) applicant's attorney hereby challenges this view and asks whether the Examiner can show support for this view, or in the alternative suggests that the rejection be withdrawn.

Claim 50 is:

An energy storage device, comprising: dry fibrillized electrode means for providing coated electrode functionality in an energy storage device.

Claim 51 is:

A capacitor, the capacitor comprising:

a housing;

a cover;

a collector, the collector disposed in the housing, the collector comprising two ends, a first end coupled to the housing, a second end coupled to the cover;

a dried electrode slurry, the dried electrode slurry disposed as a coating onto the collector, the dried electrode slurry comprising a dry fibrillized blend of dry carbon and dry polymer, the dry

fibrillized blend comprising of essentially no processing additive; and

an electrolyte, the electrolyte disposed in the housing.

5 The Examiner rejects this claim as supposedly anticipated by Kao at some unspecified location within Kao. As best understood by the undersigned, however, Kao does not disclose a capacitor but instead discloses a “capacitative-type battery”. As commonly used, the words “battery” and “capacitor” are not synonymous. Indeed the very fact that Kao seems to feel the need to modify the noun “battery” with an adjective “capacitative-type” seems to reinforce that the words are not synonymous. It thus appears
10 that the Examiner is of the view that “capacitative-type battery” is supposedly synonymous with “capacitor”. Applicant's attorney disagrees with this view, and motivated by the case of *In Re Ahlert and Kruger*, 165 USPQ 418 (CCPA 1970) applicant's attorney hereby challenges this view and asks whether the Examiner can show support for this view, or in the alternative suggests that the rejection be withdrawn.

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The Examiner is apparently of the view that the limitation of “essentially no processing additive” is found at some unspecified location within Kao. It appears to the undersigned that Kao teaches away from this, teaching any of a variety of solvents and additives. See for example “water” at page 5, line 23, and again at page 6, line 50. The Examiner is invited to cite a page and line number where this
20 limitation may be found in Kao, and indeed to refute the apparent “teaching away”, or in the alternative to withdraw the rejection.

Claim 52 is:

25 The capacitor of claim 51, wherein the capacitor comprises a capacitance of greater than 1 Farad.

The Examiner rejects this claim as supposedly anticipated by Kao, and expresses the view that this capacitance limitation is supposedly found in Kao at some unspecified location. It appears that the
30 Examiner is of the view that this capacitance limitation is somehow “inherent” in Kao. Applicant's attorney disagrees with this view, and motivated by the case of *In Re Ahlert and Kruger*, 165 USPQ 418